Environmental Health Perspectives
Vol. 18, p.1, 1976

Introduction: Target Organ Toxicity—Development

by R. L. Dixon*

The Society of Toxicology and the National Institute of Environmental Health Sciences, recognizing the need for periodic review of the methods used in the assessment of chemically-induced toxicity, are cosponsoring a series of symposia on Target Organ Toxicity. Participating scientists, having expertise relevant to various organs and tissues, will: (1) review the morphology, physiology, and biochemistry; (2) describe means routinely used to assess toxicity and their reliability; (3) evaluate the utility of tests for the assessment of hazard; and (4) propose the application of recent advances in basic science to the development of practical test procedures. This activity is being coordinated by Drs. Joselph F. Borzelleca, Robert L. Dixon, and Perry J. Gehring.

The first symposium considered the hepatobiliary and renal system and was organized by Drs. Gabriel L. Plaa and Jerry B. Hook. The second meeting was organized by Drs. Hans Peter Witschi and Robert T. Drew and focused on the lung.

This meeting concerns the reproductive system with emphasis on mammalian development. Special attention was directed to developmental aspects of transport, distribution, excretion, and biotransformation; morphology, physiology, and biochemistry of normal and abnormal development; predictiveness and limitations of test methods in teratology; and the more subtle and delayed functional effects of gestational and early postnatal chemical exposure (transplacental toxicology). An evening session focused on behavioral teratology, and a sample test battery developed by the Committee on Postnatal Evaluation was presented for discussion. These areas reflect the current major research interests of the Environmental Toxicology Branch of the NIEHS as well as critical problem areas in developmental toxicity.

* National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709.